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THE GENESEE FARMER.

SATURDAY, MAY 28, 1836.

Transplanting from Hot-Beds.

In a former volume of our Journal, we mentioned the advantage of covering seedlings when transplanted with flower-pots, having first made the experiment simply with a view to shade them from the hot sun, and without anticipating that our success would be so complete. The hole in the bottom of the pot, like a chimney, lets off the heated air; and the plant is preserved fresh, cool, and unwithered, during the hottest weather. A few days ago when the thermometer stood at 78°, in the shade, we lifted the pots from several plants which had been set out the evening before and *watered*, and not a drooping leaf was found.

Flower-pots, without holes in the bottom, would not answer the same purpose; for the heat would accumulate on the inside and the moisture be evaporated.

It will sometimes happen where the garden consists of a heavy loam, that the soil instead of being reduced to a fine tilth, is lumpy; and in such cases, a small portion of fine earth thrown into the hole before the plant is set, would be an improvement well worth all the labor, as the plant would be less liable to wither, and grow better afterwards.

Cobbett recommends in transplanting cabbages, to press the earth firmly round the point of the root. His words are: "The general and almost universal fault is, that the planter when he has put the root into the hole, draws the earth up against the upper part of the root, and if he press pretty well there, he thinks that the planting is well done. But it is the point of the root against which the earth ought to be pressed, for there the fibers are; and if they do not *touch the earth closely*, the plant will not thrive."

This remark was made with reference to setting them with a dibble, a method which we have not adopted. Our plan is, to make a hole with either the hoe or the trowel, about three inches deep; and placing the root on the bottom, we draw in the fine earth, in successive parcels, and press it firmly down as often as a new parcel is applied. We like this method of planting, and the operation may be performed very expeditiously.

ERRATA.—Page 153, col. 2, line 17 from bottom, for "it," read *It*—col. 3, line 17 from bottom, for "Mencoirs" read *Memoirs.*

Culture of the Potatoe.

A writer in the Gardener's Magazine (Loudon's) says, "I am satisfied by *repeated experiments* that one-third more potatoes, especially of the kidney kind, are produced by whole potatoes than by cuttings or sets."

He adds, "A Yorkshire gentleman who plants yearly 150 acres for the London market, informs me that he plants sets and not whole potatoes, and thinks 350 bushels an acre a very great crop. Now I have repeatedly grown from 500 to 600 bushels per acre."

He details the following experiments: "One row was planted with eight *whole* potatoes, each containing eight eyes, sixty-four in the whole. Produce 33 potatoes; weight 12 lbs.

"Two rows of the same size were planted with eight sets each, each set containing four eyes, sixty four in the whole. Produce 52 potatoes; weight 18 lbs.

"The result was, that twice the quantity of land produced only an excess of one-third in weight; but if two rows had been planted with whole potatoes, the produce would have been 24 lbs. I have *repeatedly tried the experiment*, with nearly the same result and therefore I come to the conclusion that it is more advantageous to plant whole (kidney) potatoes than sets. The rent, the taxes, the ploughing, and the dung must be the same in both cases. I calculate that my Yorkshire friend loses £7 an acre, or 1000 guineas a season by the use of sets."

We should be gratified if some of our readers would make similar experiments on *whole*, and on *cut*, potatoes; and forward the results to us for publication.

Planting Trees—No. 2.

The Americans as a nation are utilitarians, and carry out this feeeling more or less in all their pursuits. Whether moddling a constitution, making a state, purchasing an empire, or planting a tree, *cui bono?* is the question they are constantly asking. This principle is a good one; the only difficulty attending it seems to be, that it renders too many of us unwilling to attempt any thing of which the advantage, however certain, is a few years distant. Mathews, the foreign commedian, affirmed "that the Americans never undertook any thing they could not accomplish in twenty minutes,"—this is an undoubted exaggeration, yet it is certain that a delay of twenty years in the completion of an undertaking, or a return of profit, to the great mass of the community, renders it nearly the same as a postponement till doomsday. There is no other way in which we can account for the reluctance with which many of our farmers enter upon the cultivation of trees, not for ornament merely, but for the indispensable purposes of timber and fences. When we recollect that the expense of fencing one hundred acres into ten acre fields cannot, under favorable circumstances, be less than five hundred dollars, and in most cases will require even a larger sum, and that from twenty to thirty thousand rails will be required, it is a matter of surprise that farmers can see their fences decay without so much as an effort to provide the means of repair or renovation. Urge them to plant trees, to form nurseries and groves of the chestnut or locust, and the reply is—"What good will it do for me to plant these nurseries or woodlands? I shall never live to see them fit for use." Very likely it may be so, but it is not by any means certain; and what even if you should die before your young chestnuts were fit for rails, or your locusts or cedars for posts, would they be lost? Have you no children or heirs?—or have you no regard for the public good? Are you wise in confining your efforts to the benefiting of mankind in the paltry circle marked out by your own lifetime? Farmer, look at this subject well, and look at the condition of your farm, before you conclude to let another spring pass without planting trees either for ornament or for use.

The second kind of trees generally chosen in this country for ornamental planting, are such as possess some quality peculiar to their wood, which gives them use in addition to their value for the purposes of ornament. Of these we shall enumerate a few, and the first is the wild black cherry, *prunus cerasus*, of our forests. This tree in its native state grows to a majestic size, being sometimes found three feet in diameter, and seventy feet without a limb. There was a time when the fruit of this cherry was in great demand for the preparation of various liquors and cordials, but the age of temperance has supervened, and the tree is now only valuable for its wood and other qualities. Next to black walnut, the cherry furnishes the best wood for cabinet work to be found in our forests, and it is far more extensively used than any other. For timber it is excellent, being strong and durable, very little liable to warp or crack, of good grain, and receiving an excellent polish. It grows quick, and is a desirable tree in almost every respect. The only serious drawback that we know to its general adoption is, that it is a great favorite with the caterpillar, being frequently covered with webs and worms, and stripped of its leaves, while other trees near entirely escape. A little attention, however, in the season of their commencing depredations, will enable the farmer to destroy them on the cherry, as well as on his apple trees, and in no case should a worm's nest be overlooked or neglected.

Another tree, a native of our forests, and which we think more deserving of cultivation than almost any other, is the sugar maple, *acer saccarinum.* It is a most beautiful tree in its growth—it furnishes a substitute for the sugar cane of the South, and for fire-wood is only equaled by the hickory. There is no tree which exhibits a finer foliage from the rich green it puts on in the spring to the brilliant crimson of its latest autumn dress; and none does more, from its various and splendid hues, to give the American forest in autumn the resemblance of an ocean of flowers. The *acer rubrum*, or soft maple as it is frequently called, is another beautiful variety of the maple, distinguished in the forest, or when cultivated, by its bright red flowers,

which open sooner than those of any other native forest tree, furnishing a fine contrast to the leafless branches and winter garb with which it is surrounded. This maple, too, furnishes more of those splendid specimens of what is called curled maple, used so extensively for veneering in cabinet work, than the sugar maple—specimens of which in some instances are unrivaled in beauty, and susceptibility of high polish, by any other wood native or imported.

The white oak, *quercus albus*, is a tree that should receive more attention than it does; and its majestic growth renders it almost indispensable, where large pieces of timber, combined with great strength and durability, are required. Though exceeded by the live oak in duration, it is not like that confined to a limited line on our southern sea coast, but spreads over most of the continent, constituting a large and valuable, but rapidly decreasing, part of our native forests. Strange as it may seem, such is the demand for this timber, it has been estimated that for the national purposes of ship building, &c., the country east of the Allegany mountains will be completely exhausted within fifty years from this time,and the western states must then be relied on for a supply; and from the manner in which timber of all kinds is there disposed of, it is evident that within a century, white oak timber will be a desideratum in the United States. We think we hear one of these men who literally obey the injunctions of Scripture, and take no thought for to-morrow; who never in their lives cast a thought fifty years forward, exclaim, Pshaw! making calculations for the nation, and a navy, fifty or a hundred years to come. Who knows whether there will be such a thing as a nation or a navy at that time? To this we have only to answer, such were the cavillings and the ridicule shown, when Evelyn and the kindred spirits that acted with him planted those thousands of acres with the oaks, that now and for many years have repaired and rebuilt the navies of England, and which, with but a single exception, have carried her arms in almost undisputed triumph round the world. The time may come when the oak will be as valuable in this country as in England; shall we here, as they have there, an ample supply, furnished by the energy and forethought of government or individuals?

There are few trees which have met with more favor as an ornamental tree, or which better deserve cultivation, than the yellow locust, *robinia acacia*. Its quick growth on soils favorable to its cultivation—and such seems to be all that is rather porous and open, than hard and compact—the beauty of its foliage, its great durability, and the high value put on the wood for posts and tree nails, have caused it to receive more general attention than almost any other of our native forest trees. It sometimes suffers from the attacks of an insect called the borer; but apprehension of this should not prevent its general spread from the numerous nurseries where it is cultivated for sale. The seeds treated in the the ordinary manner frequently fail, but every farmer may readily raise the plants by gathering the seed, and when he wishes to plant them, pour boiling water upon them and let them stand twenty-four hours; then select the seeds that are swelled, and again repeat the operation, until a sufficient supply is procured. The seeds that swell rarely fail of growing. The honey, or three thorned locust, is not considered as valuable for timber as the yellow locust, yet when planted close and frequently headed down, it forms a most formidable hedge, and one of the best preservatives of fruit gardens, vineyards, &c. that has yet been invented. The method of cultivation from the seed is the same as with the yellow locust; and it is well deserving the space and care requisite for its growth.

The red cedar, *juniperous virginiana*, is a tree of great value for its wood, when of sufficient size for timber or posts, and also for hedges, as when properly trained it is almost impervious. This is one of the trees which will soon become extinct as a timber tree in the United States, unless some measures are taken for its propagation and preservation. It is extensively used in ship-building, and a substitute for it would be found with difficulty, combining, as it does, lightness, strength, and the greatest durability. G.

Germination of Seeds.

There is a complaint frequently made by those who purchase their garden and other seeds, that they do not grow; and hence it is inferred that unripe and inferior seeds are put up, to increase the sales, and consequently the profits of the gardener and the seedsman. This inference may in some few cases possibly be correct, but that it is so in all cases where seeds do not grow is evidently wrong; for no fact is more clearly ascertained, than that good seeds do not always germinate. Two things are indispensable to the germination of seeds—heat and moisture; if either of these is absent, the process must be suspended. It follows, as a necessary consequence, that seeds planted so deep that the rays of the sun cannot influence them must remain in a state unfavorable to their growth; and if planted in a soil where there is warmth but no moisture, the same results will ensue. Some seeds have a coating so hard that they rarely grow under ordinary circumstances. The man who should condemn his locust seed because they did not grow,when planted without preparation, would only manifest his ignorance; by pouring boiling water upon them and allowing them to stand 48 hours, he would find that most of them would germinate. The germination of beet seed is much accelerated, and rendered more certain, by the application of water nearly at the scalding heat, and allowing them to remain in it for twelve hours.

The application of the above priciple may assist J. D. in determining the cause of his failure in germinating the mangel wurtzel. Our experience in the cultivation of this root has not been extensive, but perfectly satisfactory, and we have found no more difficulty than in growing the common bee. In sowing it we have rarely had a seed fail, and our seed we have hitherto purchased of the seedsmen. In all possible cases, however, farmers should raise their own seeds; they can then choose their favorite varieties, and be certain of their kind and quality. The saving of seeds requires but little time or labor, and frequently prevents serious trouble and loss. G.

Washing and Shearing Sheep.

Do not be in a hurry to wash. The first of June is quite early enough in our latitude, and to wash earlier will be injurious rather than otherwise. Before the introduction of the Merino, the plea for early washing was, that as soon as warm weather came on the fleece would start, and unless taken off, the roots of the wool by friction would full together, and thus render the whole *hide-bound*. This plea is now entirely done away with, as there are few flocks that have not enough of the Merino blood in their veins to prevent the wool fulling, and sheep should not be exposed naked to the chilling winds and storms that accompany our early spring months without the most evident necessity. Sheep should not be driven a great distance to wash. Formerly, when sheep-washing was a frolic, and noted for the absorption of the ardents, a journey of three or four miles to some river or lake was considered indispensable; and if one half of the sheep, in traveling along the dusty roads on their return, gathered more dirt than was left at the washing, it was considered as well enough and a matter of course. There are few farms on which there is not a stream large enough to fill a vat or large tub, and such a place is one of the best to wash in, both for the sheep and the washer. Put the sheep when washed into a clean pasture, and not, as many farmers do, suffer them to range ploughed ground at will.

Do not be in a hurry to have them sheared after washing. The practice has generally been to shear as soon as dry. This is not correct. There should be time for the wool to regain some part of the oil it has lost by washing. Eight or ten days is not too long for the fleece to remain, and it is better for seller and buyer, as the fleeces are of course rather heavier, and the wool will be of a better quality, and keep better for the manufacturer. Never allow a bungler to touch one of your sheep with a pair of shears. Better pay him what he would have charged you for the day, and send him off, than to have him on the premises. A gentleman in Columbia county a few years since, as an experiment, obtained leave to have his shearer shear over again some of his neighbors' sheep, sheared in the ordinary careless manner, and the least quantity obtained was three ounces a head, while some went as high as eight. Take the lowest amount, and if you have one hundred sheep, you lose twenty pounds of wool, worth ten dollars, by having them sheared as, we are confident in affirming, one half the sheep in the country are sheared. If we have fifty millions of sheep in the United States, the loss by bad shearing must amount to an enormous sum. After shearing, let your sheep have a grove to run into for a few days, or a pasture where there is plenty of shade. This will prevent the burning of the skin, and the consequent formation of scabs. G.

Inquiry.

An esteemed correspondent propounds to us the following queries:

"If I cut down a plum or cherry tree, thousands of shoots spring up, filling the ground. I wish to know the best method of preventing them. What time of the year must the tree be cut, or

what can be done to the stump, to effectually kill the roots? In answering these questions, you will oblige at least one of your readers."

Native Locality of the Peach.

Writers who have mentioned the history of the Peach, say that it came from Persia; but this fact will not prove that country to be its native locality. The Madeira nut is by many Anglo-Americans called English Walnut,—and to us, it came from England; but this nut is not indigenous to Britain.

If the Peach had been a native of Persia, we have much reason to believe that its name would not have been omitted in the Scriptures. The grape, the fig, the almond, and other fruits, frequently come under notice; but nothing relative to the Peach occurs.

We have therefore been long disposed to inquire of travelers in the East for further particulars. *Timkowski* who accompanied the Russian Mission to China in the years 1820–21, says, the Peach is extremely abundant in the neighborhood of Pekin; but *Royle* in his Illustrations of the Natural History of the Himalayan Mountains and of Cashmere, comes directly to the point, and we insert his paragraph on the subject entire:

"The peach was introduced into Europe from Persia, a country in which the fruit is very fine, and where both the free and clingstone varieties are known, and called *kulloo* and *kardee;* the general name for Peach being, Persian, *aroo*, and Arabic, *khookh*. They ripen well, and are of a fine flavor in Peshawur; also in the north of India, with *the well-flavored flat Peach from China*. With care it succeeds also in the elevated land of Mysore; *it is found wild in different parts of the Himalayas*, as about Mussooree, at elevations of 5000 ft. and 6000 ft. In the district of Bissehur there is *a distinct kind*, called *bhemee* by the natives, (*Persica saligna*, nob,) which though small, is juicy and very sweet. The Nectarine is found in gardens in Northern India, where it is called *shuft-aloo*, and *moondla* (smooth) *aroo*, though it does not perfectly ripen its fruit, nor is it known from whence it was introduced, though probably from Caubul."

Ornamental Plants.

We continue our selections from J. Breck's notices of hardy herbaceous plants suitable for ornamenting the parterre, border, or shrubbery.

"Pentstemon staticifolius,

Is a beatiful hardy new species, figured in Edwards' Botanical Register for June last, which was sent to the London Horticultural Society by the lamented Douglas from California. It was then extremely rare, only one plant having been originally raised.

"Pentstemon altro-purpurens,

Is also an ornamental species, with fine dark ruby purple flowers which are produced from July to October: one foot and a half high. It is a native of Louisiana. It flowered finely with us the last season, and succeeded best in a rich, black, moist soil.

"Pentstemon cœruleum,

Is one of the finest of the genus, a native of the south with beautiful flowers. We saw this in bloom last season at Cambridge Botanic Garden.

"Pentstemon pulchella,

Is a handsome species, with large bell-shaped, pale-purple flowers; one foot high. It flowered finely through the last autumnal months, in one collection, although it was from the seed the same season."

We have copied these *specific names* exactly as they occur in the paper before us. They are all strictly *adjectives*, and as such ought to agree with the noun in gender; it would appear that the generic name is masculine, feminine and neuter. It is remarkable that botanists have not agreed on this point. Muhlenberg preferred the masculine gender; Eaton and Loudon seem to consider it both feminine and neuter; Nuttall, Torrey, and Beck, neuter.

"Who shall decide when doctors disagree
And *learned* casuists doubt?"

DOMESTIC.—A boat passed up the canal yesterday freighted with Durham cattle, of both sexes direct from England. The male was in fine order, and well calculated from the perfection of his form and the mildness of his age, to challenge the admiration of the farmer. We understand they are destined for Cincinnati, which is an other evidence of the enlightened views of the Ohio farmers.

From the Cultivator.

Indian Corn.

All, or nearly all, the accounts we have published of great products of Indian corn, agree in two particulars, viz: in not using the plough in the after culture, and in not earthing, or but very slightly, the hills. These results go to demonstrate, that the *entire* roots are essential to the vigor of the crop; and that roots, to enable them to perform their functions as nature designed, must be near the surface. If the roots are severed with the plough, in dressing the crop, the plants are deprived of a portion of their nourishment; and if they are buried deep by hilling, the plant is partially exhausted in throwing out a new set near the surface, where alone they can perform all their offices. There is another material advantage in this mode of cultivating the corn crop—it saves a vast deal of manual labor.

There is another question of interest to farmers, which relates to the mode of harvesting the crop, that is, whether it is best to top the stocks, cut the whole at the ground when the grain is glazed, or cut the whole when the grain has fully ripened. We have stated the experiments of Mr. Clark, of Northampton, one of the best practical farmers of our country, and of other gentlemen, showing that the grain suffers a diminution of six or eight bushels the acre, by topping the stocks; and there seems to be no counterbalancing benefit in the fodder, unless at the expense of carrying the stocks to the borders of the field, that they may be secured before the crop is gathered, and before they beeome blanched and half ruined. And it is no protection against early autumnal frosts, but rather exposes unripened grain to be more injured. Hence, so far as regards these two modes, all who have made a comparison, seem to concur in the opinion, that stripping the corn of its tops and leaves is a bad practice. William Carmichael, of Virginia, has given us in the Farmer's Register, his experiments in this matter, which go to corroborate the conclusion we have drawn. He took, promiscuously, 100 ears from corn that had been topped, and 100 ears from that which had not been topped, growing side by side. The first weighed, on the cob, 50 lbs.—shelled, 41 lbs., and measured 21 qts. 1 pt. The other, 54 lbs.—shelled, 46 lbs., and measured 26 qts.—showing a difference of nearly one-fifth in favor of unstripped or untopped corn. The fact is, that topping not only prevents the further elaboration of the sap, which can only take place in the leaves, and which is necessary for the growth of the corn, but it deprives the grain of much that is already elaborated, and on its way to the grain. if a fruit tree is deprived of its leaves, before the fruit has attained its growth, or mature flavor, the fruit will no longer grow, nor will it attain high flavor, for its supply of elaborated food, or vegetable blood, is cut off by the loss of leaves. We have noticed this particularly in the plum.

Satisfactory experiments have not been made to determine, whether it is most advantageous to cut the crop when the grain is merely glazed, or to wait till it is perfectly ripe. This will depend upon the amount of loss, if any, in the grain, by early harvesting,—the relative value of the grain and fodder, and the prospect of both being injured by early frosts—for neither are liable to suffer from frost after the crop has been cut and put into shooks. It is to be noticed, that in early cutting, the stalks are succulent, and abound in elaborated sap, on its descent from the leaves to the grain, and that this supply of food to the grain continues to flow probably for some days after the corn is in the shook, and if so, the grain itself continues to impove, though we think it likely that the crop undergoes some trifling diminution. But if frost is likely to intervene before the complete maturity of the crop, there is no doubt but the corn will suffer less in shook than it will standing, while the fodder will be materially injured by frost. Admitting that there is a small loss in grain by early cutting, though it is undoubtedly less than when it is topped, the difference in the value of the fodder, under the two modes of management, is vastly in favor of early harvesting. We do not pretend to calculate to a nicety the difference in nutritious properties, of corn stalks cut in a succulent state, early in September, well cured and well housed, and those left standing till October or November in the field, but we should think it fifty per cent. Well cured corn stalks afford an excellent winter food for neat cattle; and when fodder is likely to be in demand, they may be made to contribute largely to the profits of the farm. Several of our acquaintance have kept their neat stock almost entirely upon this fodder during the past winter, and we have done the like, having first cut ours in a cutting machine; and so far as we can learn, the cattle kept upon them are in excellent condition.

The preceding considerations justify us in recommending, that in the management of the Indian corn crop, the following rules be observed, at least partially, so far as to test their correctness:

1. That the corn harrow and cultivator be substituted for the plough in the culture of the crop.
2. That the plants be not hilled, or but slightly so—this not to prevent the soil being often stirred and kept clean. And,
3. That in harvesting, the crop be cut at the ground as soon as the grain is glazed.

Manure or Food for Plants.

This substance, which is the cultivator's indispensable, has three particular enemies which you will please guard against. The foes alluded to, which effect the destruction of the best part of manure, are the sun, which exhales it, the air, which imbibes it, and the rain, which washes it away. To prevent any loss of property by these purloiners, you should either cover your manure, or put it under cover. In the former case you throw earth over dung, &c.; in the latter case you throw it under a shed, into a barn cellar, or some such place, where it is not liable to waste from the imperceptible depredations of the elements.—*N. E. Farmer.*

The farmer or planter who wishes to succeed well in his business, must always be *busy* but *never* suffer himself to be *hurried.*

COMMUNICATIONS.

LETTERS FROM A FATHER,

Living in the State of New York,

To his Son in Western Pennsylvania.

NO. XXI.

The Closing Letter of the Series.

To MY SON—I have, in the preceding letters, adverted to and briefly noticed the fundamental principles of rural husbandry. Notices have been taken of the most important varieties of field culture, and, it is believed, nearly all those varieties which are likely to be interesting to you. The culture of the garden, of fruit trees, trees of ornament, and grape vines, might have been introduced, and made the subject of several interesting letters. Although these subjects came not within the plan of my work, and have not been treated of in these letters, yet I recommend them as abundantly worthy of your practical regard. Especially I advise you to be particular and nice in the cultivation of your garden. A well fenced and well cultivated garden should be considered as an indispensable appendage to every farming establishment.

Hitherto my letters have been exclusively devoted to the means of improving secular interests. I do not consider myself as indulging an unhallowed and forbidden cupidity, when I desire you, and all my children, to be thorough, skilful, and successful managers of temporalities. To practice industry in the occupations of life—to study and pursue the principles of economy, and endeavor, by honest and lawful means, to obtain, for ourselves and others who are dependent on us, a comfortable subsistence, are duties clearly enjoined by the Christian religion. We cannot neglect these duties and be guiltless. "If any provide not for his own, especially for those of his own house, he hath denied the faith, and is worse than an infidel." While I say these things, and quote such authorities, let it not be understood that I desire you, or any of my children, to be rich in perishable treasures. This I could not desire, unless I might expect you to apply riches to their legitimate use, and not abuse them. Yet it is my desire, that my children may possess enough of this world to render them as comfortable as worldly goods can make them. If it should please God to give them overflowing treasures, and give them withal dispositions to do good with their substance, I should regard this as a kind Providence, and, I trust, be thankful for it.

To you then, and to all others who look to me for advice, I say, be industrious in your occupations—study the principles of economy—plan your business well—endeavor to acquire a perfect knowledge of the art which you practice—be prudent and cautious as to your expenditures, and careful to save the fruits of your industry. If, while you pursue the course thus recommended, Providence should throw wealth into your lap, receive it—receive it thankfully—it may be a blessing to you, but it will be so only as it enables you to become the more extensively useful. Riches are in themselves blessings, but they are so only to those who are disposed to do good—to those who are "rich in good works, ready to distribute, willing to communicate." When rich men consider themselves as holding property only as the stewards of God, and are liberal in its application to useful and benevolent purposes, the real excellence and dignity of human nature are exhibited to the very best advantage. But when I see men, as I do all around me, selling themselves to the lusts of gain, and devoting all their physical and intellectual powers to the accumulation of perishable dust—and all this for the sole purpose of self-gratification—I cannot but consider them as objects of commiseration. They are deluded men—chasing after a phantom; happy they cannot be, for as wealth increases the lust of gain increases also, and burns more and more with insatiable desires. True it is, "They that will be rich fall into temptation and a snare, and into many foolish and hurtful lusts, which drown men in destruction and perdition."

As I am now closing a series of letters, in which much has been said about vegetable culture, it becomes me briefly to notice certain other orders of culture, which, although they have not been distinctly brought into view, are indeed of paramount importance. I here allude to intellectual and moral culture. Intellectual culture consists chiefly in communicating instruction to the mind. I cannot here expatiate on the vast importance of having the mind well instructed. On this subject, the limits of my letter will allow me only to say, knowledge is of inestimable worth—it is knowledge chiefly that distinguishes man from the brute, and civilized man from the savage. As it is your fortune to be located in a new country, and among a population by no means dense, a population too whose time and resources are, in most cases, chiefly occupied in procuring the necessaries of life, there is reason to fear your children, and the rising generation around you, will be neglected, as to their education. This I should regard as a very serious calamity, and deeply deplore. Although it may not be in your power to educate your children so extensively as might be desired, yet I hope neither yourself, nor the other members of the community to which you belong, will be negligent of an interest so highly important. Every one of your children, and every child in that vicinity, should receive at least a good common education. It should be understood, that the standard of education is on the rise, and is now many degrees higher than it was twenty years ago. A scholar who has merely become a good reader and writer, and learned the fundamental rules of arithmetic, would not *now* be considered as having acquired a good common education. It is at this day expected of scholars, who have been taught only at common schools, that they will be masters of arithmetic, understand grammar, be well instructed in geography, and have some knowledge of natural philosophy. I fear my beloved grand-children will not be able to arrive at these attainments. Yet let none of them be discouraged. Although the advantages of some of them may not be so good as might be wished, yet if they will do justice to themselves, they may all become good scholars.

In districts where good advantages of schooling cannot be enjoyed, parents might do much more than is generally done, to promote the education of their children at home. Many portions of time, which are usually lost, might be devoted to family instruction. If parents, under the circumstances here supposed, would learn to manage their affairs systematically, they might daily set apart certain portions of time for the instruction of their children, and yet sustain no loss as to temporalities. Families, composed of children capable of rendering themselves profitable by their industry, might, to some extent, be modeled after the manner of manual labor schools. It is, if I mistake not, easy to conceive, but perhaps not so easy to point out, systems of management which might be employed to great advantage, in promoting the domestic education of families. Parents should provide for the use of their children suitable books, and endeavor to cultivate in their minds a taste for reading. They should frequently hear them read, and question them on the subjects of their reading. Among the books composing a family library, a dictionary should always be considered as indispensable. Children should, in very early life, be taught the use of a dictionary, and be encouraged to use it so frequently, as to render its use perfectly familiar.

Sundy schools, which, to the honor of the age in which we live, have become general in this and other countries, not only contribute to the moral and religious improvement of children, but exert a happy influence in promoting their general education. The scholar who studies his Sunday school lessons, and receives instruction, can scarcely fail of making some additions to his literary acquirements. Besides, these schools are generally accompanied with small libraries, composed of useful books, which are happily adapted to the juvenile mind. The scholars have the use of these books, and the tendency is, to excite in their minds a taste for reading. I consider the Sunday school system as one of the most important institutions of modern times.

I regret that the space allotted for my letter will scarcely allow me to say any thing on the subject of moral and religious culture. Yet I regard these as supremely important. The Holy Scriptures and the ministrations of the Gospel are the principal means to be employed for the promotion of these varieties of culture. Do not neglect the means. "To fear God and keep his commandments"—to "do justly, love mercy, and walk humbly," constitute the happiness, the duty, and the whole excellence of man.

There are a few things more which I desire to say, before I close this letter, and with it the series of letters with which this is connected. It is expected that you will read all my letters attentively and frequently, and preserve them, not only for your own future use, but as memorials of your father. It has, as you must be sensible, cost me no inconsiderable labor to write so many letter, and prepare them for the press. I have done it with a primary view to your improvement in the arts of husbandry. If the letters shall prove to be useful to you, as I trust they will, it will be considered that my labor is amply rewarded. Infallibility in my knowledge of agriculture and its kindrid arts I do not claim. It can scarcely be doubted that a more perfect knowledge of husbandry will prove some of the theories which I have advanced in these letters to be incorrect.

Through the generosity of Mr. Tucker, the

worthy proprietor of the Gen. Farmer, you have, as I suppose, been supplied gratuitously with all the numbers of that journal which contain my letters. Thus an opportunity has been afforded you, and I trust many of your fellow citizens also, of becoming acquainted with the merits of that permanently useful paper. Has it not commended itself to your high esteem and approbation? Sure I am you will, if you duly consult your own interest, ever hereafter have your name enrolled among the subscribers for that paper, or some other useful agricultural journal. The Genesee Farmer has no superior in point of excellence—it should circulate freely in every farming community; but for those who are not able, or not willing, to take a paper which costs $2 a year the Monthly Farmer, which issues from the same press, and costs only 50 cents a year, will answer as a valuable substitute. To the wants of that community of farmers with whom you are connected, it is, in my opinion, most happily adapted. A thousand or more copies of it should circulate in the county in which you live.

Now, my dear son, having finished the labor which I had undertaken in your behalf, I bid you an affectionate adieu. A Father.

New York State, May, 1836.

On Irrigating Meadows.*

BY E. WILBUR.

Friend Tucker—As there has been considerable said in thy paper on the subject of irrigation, it may perhaps by some be thought unnecessary to say any thing further on the subject; but, as it is one of considerable importance, perhaps there cannot well be too much said; and the scarcity of fodder for the two past years will be a sufficient excuse for what I may offer on the subject.

In the first place, it is my opinion that if the water in the state of New York should all be used to the best advantage, which is now useless, or perhaps I might say worse than useless, there might be an addition of hay through that means that would be worth one million of dollars, and perhaps more. This calculation to some may look wild, but it is nevertheless true, for there are but few farms but what have some streams running through them some part of the year—some little swales where water runs for a considerable time in the wet part of the spring. Now all this may be used to advantage where the ground descends enough to take them from their natural channel. Do not be scared for fear it will require some work, but try it and be satisfied for yourselves. I have tried it and know it to be true. I once bought a small farm in Yates county, on which there was scarcely an acre of natural meadow ground. Its former occupant did not cut any hay on the farm, but used to mow around the neighborhood on shares wherever they could get a chance; and so I had to do the first year, until I ploughed the ground and seeded it, for it was as dry and barren almost as a road; I mean the piece which I selected for my meadow, of perhaps about seven acres, on the lower side of my farm. The farm all descended considerably to the east, and the object of selecting that piece for my meadow was, that I might get some water on it in wet times. The road run up and down the hill on one side of my meadow piece, and nearly through the middle of it there ran a little swale about the same direction, perhaps in some places two rods wide, and in others not so wide. Well, some may say, what of all this?—what has the road and this little dry swale to do with your meadow?—for the water did not run there perhaps half of the year. I have been pretty particular in describing the situation, in order to show the effect of making the best use of water when we have a chance, and that it is not always necessary to have a durable stream in order to raise heavy grass. Well, now for the management. After I had got my piece of land seeded for meadow, the next thing was to make use of the water, which I did in the following simple and easy manner. I took my team and plough in the spring of the year, when the water run pretty freely in this swale, and started a furrow at a point in this swale where I thought I could carry the water on the highest ground in the meadow; after starting a few paces, I stopt for the water to follow, and observe the current, so as not to get so high that the water would not follow, or so low as to give too much current. In this way I carried it on to the highest and dryest part of the ground, and then let it spread over as much as it would. But little more needed to be done to the ditch than to make the furrow and clean it out a little with a hoe. I made several other furrows from the swale below the first one in the same manner, to carry the water that dreans off into the swale again. In this way I lose but very little.

Almost every body has noticed, that in the spring of the year when the snow is going off, or after a smart shower, that the ditches by the road side will be filled with water, and if the road runs a little up hill, the wash of the road will run off, and generally into some swamp or hollow, where it does but very little if any good. To prevent this waste, I made several furrows from the road side to carry the wash on to the meadow.

And what was the effect produced by these few furrows, which at first did not perhaps cost me more than a day's work? Why, the effect was such, that it paid me an hundred fold for the seven acres after the first year. When the sod got well made so as to grow thick, it produced for several years while I owned it, from two and a half to three tons of hay to the acre; and the man that I sold it to, told me last year that he hardly ever saw such grass—there was hardly room on the ground to make the hay after it was mowed. Now if people could generally be made to believe this, and to pay attention to it, it would soon be found that my assertion was not very extravagant in regard to the additional quantity of hay that would result from it. But perhaps my brother farmers are so taken up with the political slang of the day, that they will do as they always have done, neglect that which most concerns them for trifles, or that which is of little consequence to them in the way of their business.

Now to conclude: If thee can make any thing out of this that thee may think will be worth the trouble thee can do it, if not commit it to the flames; but it really does hurt my feelings to see the loose manner in which farmers generally manage their business. I could say much upon the subject of farming in general, but feel myself incapable of doing any thing like justice to the subject, and therefore I forbear at present, and subscribe myself thy friend. E. Wilbur.

Macedon, 3 *mo.* 2, 1836.

* We owe an apology to our correspondent for the delay in the publication of his communication. It would have appeared sooner had it not been mislaid.

Experience versus Theory.

BY AN ONONDAGA FARMER.

In looking at the notes appended by Judge Buel to his article on corn, as published in the 3d volume of the Farmer, my attention was arrested by the following passage:—"I adopt the opinion of Davy as the *modus operandi* of plaster of Paris, that it forms a necessary constituent of plants which it benefits, and is of no direct benefit to plants which do not afford it an analysis. Among the first are the clovers, corn, potatoes, and generally such plants as have broad or succulent leaves; while the latter embraces culmiferous grains and grasses, as wheat, rye, timothy, &c." So it seems that we farmers of Onondaga, and all West New York, have all along totally mistaken the matter, and by attributing our increase of wheat, barley, oats, and the grasses, to the plaster we have put upon them, have assigned an effect to a wrong cause. But "a man convinced against his will, is of the same opinion still," and I am somewhat in that predicament; and presumptuous as it may seem to differ from such authorities, I must respectfully beg leave to record my dissent to this reasoning and its inferences. If it were true that plants are *never* benefited by any thing which does not become a *constituent part* of their substance, then there would be more plausibility in Davy's reasoning; but is such the case? Who doubts that oxygen is of essential service to plants?—yet who has detected it as a constituent part of their substance?—that is, what chemist, by the analysis plants, has shown us oxygen in substance, as it is asserted that plaster must be before it can be beneficial to plants? I believe that if plaster does not become a constituent part of plants itself, by its chemical organization and action, it supplies what is absolutely essential to their formation and growth, carbon, a substance always and easily detected in the analysis of plants. But theory aside, what are the facts as to the benefit of plaster on the culmiferous grains and grasses? What says actual experiment? Many of my neighbors are observing men, and have made experiments on this very subject. Mr. S. K. is certain that one-third at least was added to his barley by the use of plaster last year. Mr. T. C. is confident that by sowing half a ton of plaster on part of his field of oats, he added at least 100 bushels to the whole yield. Mr. R. G. sowed plaster on two acres of oats, part of a large field, and at harvesting, there was a trifle more than double the quantity on these two acres than on two acres not sown. Mr. E. G. assures me, that were it not for plaster, he should be unable to sow wheat with profit on some parts of his farm; with its use, the dry gravelly ridges produce abundant crops, and of the finest quality. For myself I have long had no doubts on the matter; ample experience and observation have

convinced me, that on the proscribed plants above enumerated, it is most useful; and I believe the farmers of old Onondaga, as a body, would almost as soon consent to relinquish the sowing of wheat, barley, oats, timothy, &c. in their fields, as to abandon the use of plaster in their system of cultivation.

AN ONONDAGA FARMER.

Mangel Wurtzel.

BY E.

MR. TUCKER—This root has attracted much attention here for the last two years, and its value as an article of food for stock, as well as the great quantity which may be produced from an acre of ground, has induced many farmers to experiment upon its culture. These experiments, however, have been upon a small scale, and the result in most cases a total failure. Many now regard it as an uncertain crop, and the chances of success so small, that I fear they will abandon it altogether. But I hope the experiments of the present year will be more successful, and redeem the character of the crop. It is true we have had but little success with this crop, but I am of the opinion that if rightly managed, it may be as successfully cultivated as the potatoe. As with other crops, a bad season may destroy it, but a good soil and *right preparation of the seed are indispensable to success.* In 1834 a friend sent me a few seeds, the first I had ever seen. These seeds were thoroughly soaked at the time he sent them, and I was so situated that I was obliged to defer planting them a day or two longer, so that they must have been in soak four or five days before planting. They vegetated quickly, and were up in three days. In the fall I gathered them and fed them to cows. They devoured them so greedily that I was induced to try them again the following season. I accordingly prepared some ground, and towards the last of May I planted the seed *dry*. The result was, on one-eighth of an acre which I planted, I never could find half a dozen plants. I shall try the experiment again the present season, with seed thoroughly soaked, and covered half an inch in depth with finely pulverized earth.

Yours, &c. E.

East Bloomfield, May 12, 1836.

Try it—will you not?

BY PLANTER

Reader, I take it for granted you are a farmer; and if so you are gratified with the sight of a field of ripe corn, and are moreover a lover of good pork, an article which, without the first, is with difficulty produced. Perhaps of all our crops there is none more beautiful than that of Indian corn, and when properly and successfully cultivated none more profitable. From the time its broad green leaves meet and shade the ground, till the self husked ears of October convert the land into a field of gold, all is delightful to the eye of the farmer. What I wish is, to have you make an effort to raise more corn on a given quantity of land, and thus save land, time and labor, three things of great consequence to the farmer. I have supposed you to be a farmer, and of course a thorough one; and have a right to presume that your land to plant, whether repeatedly ploughed, or sward land simply turned over, is in first rate order, rich in itself, and heavily manured, as every good farmer knows that this is a crop that bears manure better than almost any other. Select one acre of this land of an average quality with the rest, and instead of ridging or furrowing it for planting, as you do the remainder, in rows of three feet or more distance, harrow it until it is as fine, and smooth, and level as you can make it. Then take a chain, if two at a time so much the better, and draw them across the acre in straight lines at the distance of two feet and a half from each other. The furrow thus made will serve as a guide in planting, which is to be performed by putting in two kernels of seed corn once in eight inches in the line made by the chain. When you plough and hoe your other corn, run your cultivator through between the rows of this acre, pull out the weakest plant in each hill, leaving but one in eight inches—the object of putting in two kernels being to secure one at least—dress the ground clean but let it remain level; and at the second hoeing let the usual hilling be dispensed with. The rows should run north and south, that the gronnd for a few hours in the middle of the day may feel the warmth and powerful influence of the sun.

Now I wish you to make this experiment; it will not be a costly one, and may prove a profitable one; for if you should get one-third, or one-half more on an acre, than you have commonly done, it would show that that quantity of land might be converted to some other purpose. The school of experiment is a good one, for experience is nothing but the teaching of experiment; and farmers here should be the first and readiest learners.

PLANTER.

From the New England Farmer.

Premium on Land and Crops.

At the late annual meeting of the Agricultural Society, Mr. William Clark, Jr. of Northampton, presented his claim, and obtained the Society's highest premium, offered "on the greatest quantity of land reclaimed and crops therefrom, accompanied with a written description of the management, condition and worth of the land, before and since reclaimed." The Executive Committee have the privilege of presenting a detailed account thereof, and would be very happy for the opportunity of exhibiting many other similar experiments made by our enterprising farmers. Mr. Clark also obtained the Society's highest premium for the greatest quantity of Indian corn raised the past year upon another tract of land.

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To the Executive Committee of the Hampshire, Hampden and Franklin Agricultural Society:

Gentlemen—In the spring of 1834, I comenced ploughing for a crop of corn, a field of about fourteen acres. In various parts of the field were swales, wet, springy places and swamp holes, some parts of which were covered with water most of the season, some with moss and small bushes, and others with sedge and coarse grass, amounting in all to four or five acres. The best part of this wet land was mown in 1833, and gave of poor hay but little more than enough to pay the expense of gathering; the remainder was entirely unproductive and probably ever had been.

As it was desirable that these places should be something more than mere nuisances, and if possible, the whole field wear the appearance of civilization, it became a question for consideration, whether it could be done in such a manner as that the produce would pay the expense. After a careful view of the ground, it was thought that the plough would be the readiest and least expensive instrument for draining off the water as well as subduing the wild grass and shrubs.

A long swale running nearly through the lot, with a moderate descent, gave a good opportunity to drain with the plough, not only the water that was oozing out over its surface, but also that from the springs and wet lands on either side.

The largest basin, or swamp hole, amounting to about half an acre, including the belt of small bushes and balk around it, and situated near the highest part of the lot, was laid dry by an under or covered drain of about six rods in length, cut through the rim of the basin, previous to ploughing; the other parts were drained of the surface water without the use of the spade, by drawing the first furrow, when striking out the lands or ridges, at such places as would cut off the springs, and in such directions as would give sufficient fall to the water, and lead it into the main furrow in the long swale. Considerable care was necessary to strike out the ridges, so that when the ploughing was finished, the furrows should not only have a good descent, but lead off the water without further labor in opening communications from one to the other.

After the superabundance of water was thus taken off, and the ground became so solid that it could be ploughed, which was in a day or two, the whole was turned over; care being taken that none of the former growth should be left on the surface, but all turned under to the depth of five or six inches; if possible, without bringing up much of the poor subsoil. And to drain the ground yet more perfectly after it was ploughed, the furrows were deepened by running the plough through them a second time, and the loose earth hauled out upon the ridges. After it became sufficiently dry to work, it was rolled, and about 20 cart buck loads to the acre of horse manure, was spread from the cart over the surface and harrowed in.

The other parts of the field having been treated in the same manner, except the draining, the whole was planted with corn, in rows without regard to furrows or drains, except not planting in them. When harrowing the corn, particular care was taken not to disturb the sod, and at each time of hoeing the ground was kept as level as possible, except the water furrows or drains were cleared of the earth that the harrow in crossing them had hauled in, and a free passage for the water at all times maintained. At the last time of hoeing, the whole field was sown with grass seed, and also with about half a bushel of plaster to the acre. The whole crop of corn, as ascertained by the admeasurement of the ears, was about thirty bushels of shelled corn per acre, and had probably suffered a diminution of about twenty-five per cent. from the severity of the drouth at the time the corn was filling out.

In the wet, or those parts of the field more particularly under consideration, the crop of corn on an average was light, perhaps not over two thirds the average of the whole field, or twenty bushels to the acre, although in some places where the draining was the most perfect and took effect early in the season, it was very good.

The grass seed took well, and after the corn and stalks were cleared off, the field contrasted finely with its former appearance. The brown and sere plain, the mossy bog, and heathy knoll, were clothed in green. No cattle were allowed to go on it, nor was it fed at all, except a little by trespass.

In the spring of 1835, after the ground was settled so as not to poach, it was rolled to reset the grass roots that might be partially thrown out by the frost, crush the corn stubs, and level for the sythe. Having a preference for early cut clover, it was mown in June, part of that on the reclaimed land having begun to lodge, although the field in general was backward, not in full bloom, and according to common usage, not ready to cut. The reclaimed land suffered the least from the drouth, and gave an average of about one and a half tons to the acre, while that of the whole field was about one ton. The hay was a fair mixture of clover, herdsgrass and redtop.

Immediately after the first crop was off, half a bushel of plaster was sown to the acre. The second crop was principally clover, and the reclaimed land at this cutting also gave much the best

grass, probably an average of not less than two tons to the acre. The average of the whole field was something over one and a half tons, as ascertained by the actual weight of about twenty tons sold from the field. One of your committee went over the ground and viewed the crop at the last cutting. It is impossible to state precisely the expense of removing the stone and stumps, and that of ploughing, cultivation, and gathering the crops of the reclaimed land, or the value of its products separately, as the labor was performed in connection with that of the whole field, and no separate account was kept with any given part of it.

I will, however, submit the following estimate, as being in my opinion not far from correct, taking the average of the reclaimed land, or that part of the field which before gave no valuable product.

ONE ACRE SWAMP.

1834.	Dr.	1834.	Cr.
To clearing for plough,	$3 00	By 20 bu. at 75c.	$15
To ploughing,	3 00	Stalks,	1
To 20 loads manure,	20 00		$16
To rolling, harrowing and clearing drains,	2 00		
To planting and cultivating corn,	6 00	1835.	
To seed corn, grass seed, & plaster,	2 50	By 3½ tons hay sold in the field at $10 per ton,	$35
To harvesting,	2 00		$51
	$38 50		48
1835.		Balance creditor,	$3
To rolling, clearing drains & plastering,	$1 50		
To cutting and making two crops hay at $4 the cut,	8 00		
	9 50		
	38 50		
	$48 00		

The profit, thus far, if it may be called a profit, is small, but that the land is as thoroughly subdued and well fitted for future profit, as it would have been, under the usual three years' siege of plough and drag, and at very much less expense, I think will not be questioned. From the most worthless and barren, it has become the most valuable and productive part of the field, and the crops in two years, to say the least, have paid the expense of the improvement. The crop the coming year, other things being equal, will undoubtedly be as profitable as that of the last year, and probably valuable crops will be taken with little more than the expense of gathering for several years to come. And when it becomes necessary to turn under the present sod, it can be done at much less than half the expense of the former operation.

Respectfully, your mos't obdt serv't,
WILLIAM CLARK, Jr.

Northampton, March, 1836.

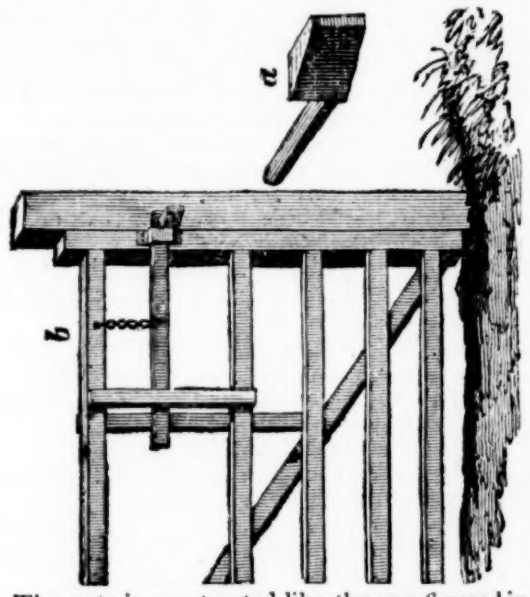
Obtaining Cream from Milk.

A process of divesting milk of its component portion of cream to an extent hitherto unattainable, has been effected by Mr. George Carter, of Nottingham Lodge, and is thus detailed by that gentleman, in a paper presented to the Society of Arts;—A peculiar process of extracting cream from milk, by which a peculiar richness is produced in the cream, has long been known and practiced in Devonshire; this produce of the dairies of that country being well known to every one by the name of "clotted" or "clouted cream." As there is no peculiarity in the milk from which this fluid is extracted, it has been frequently a matter of surprise that the process has not been adopted in other parts of the kingdom. A four sided vessel is formed of zinc plates, twelve inches long, eight inches wide, and six inches deep, with a false bottom at one half the depth. The only communication with the lower compartment is by the lip, through which it may be filled or emptied. Having first placed at the bottom of the upper compartment, a plate of perforated zinc, the area of which is equal to that of the false bottom, a gallon (or any given quantity) of milk is poured immediately when drawn from the cow, into it, and must remain there at rest for twelve hours; an equal quantity of boiling water must then be poured into the lower compartment through the lip; it is then permitted to stand twelve hours more, [i. e. twenty-four hours altogether,] when the cream will be found perfect, and of such consistence that the whole may be lifted off by the finger and thumb. It is, however, more effectually removed, by gently raising the plate of perforated zinc from the bottom by the ringed handles, by which means the whole of the cream is lifted off in a sheet, without remixing any of it with the milk below. With this apparatus I have instituted a series of experiment; and as a mean of twelve successive ones, I obtained the following results: four gallons of milk treated as above, produced in twenty-four hours four and a half pints of clotted cream, which, after churning only fifteen minutes, gave forty ounces of butter—four gallons of milk treated in the common mode, in earthenware pans, and standing forty-eight hours, produced four pints of cream, which, after churning ninety minutes, gave thirty-six ounces of butter. The increase in the quantity of cream, therefore, is twelve and a half per cent. The experimental farmer will instantly perceive the advantages accruing from its adoption, and probably his attention to the subject may produce greater results. I shall feel richly rewarded if, by exciting an interest on the subject, I can produce any, the slightest improvement in the quantity or mode of producing an article, which may properly be deemed one of the necessaries of life.—*Repository of Patent Inventions.*

From the Cultivator.

Gate Fastening.

B. Mather, Esq. of Schaghticoke, has described to us a gate fastening, in extensive use in his neighborhood, which for simplicity and cheapness, and convenience, we have not seen surpassed. We will try to make our readers acquainted with it, by the aid of the annexed cut.



The gate is constructed like the one figured in our last volume, with its principal weight towards the heel, a strong bar on the top, and so hung that it shuts readily by the force of gravity. The latch is a piece of hard wood, about 2 ft. long, 2½ inches broad, and 1¼ thick, or it may be made of iron. It is suspended by a small chain attached to the upper bar, as shown at (*b*,) so that when it strikes the bevel of the catch, on shutting the gate, it falls back, fastens, and when at rest, passes to the opposite side of the catch, behind the shoulder. It is so adjusted as to allow of little or no play, except lengthwise. The catch, (*a*,) may be also made of a piece of hard wood or of iron, and driven into an auger hole in the post. It is like a common door catch, except that the bevel is towards the gate, and not above. It has a substantial shoulder, which serves to hold the latch when it passes behind the bevel. This fastening may be made by any farmer, and the chain may be made of stout wire. It has the advantage of always becoming fastened whenever the gate is shut. The latch in the cut should have been four inches lower, near the upper slat.

The latest dates from Louisiana represent the prospect of the crops, particularly that of sugar, as never more promising.

A singular phenomenon occured ot Montevideo on the 16th and 17th of September last. There was a depression of the sea for 30 hours, the waters having retired from the harbor, and exposed all the ships anchors. The fall was 12 feet below the ordinary height of the sea.

Broom Corn.

20 BUSHELS New England Broom Corn Seed just received at the Rochester Seed Store. may 7

Flower Seeds and Plants.

IN addition to their former stock, the subscribers are now receiving a new supply of Flower Seeds, including many rare and extremely beautiful varieties never before introduced here. Price, 6 cents a paper—20 varieties for $1, 50 varieties for $2, 100 varieties for $4.

DOUBLE DAHLIA ROOTS.

A fine assortment from the unrivaled collection of Messrs. Buel & Wilson, Albany. These will be potted and ready for sale in a few days.

GREEN-HOUSE OR PARLOR PLANTS.

A splendid collection in a fine healthy condition for sale at low prices.

apr 30-ftf REYNOLDS & BATEHAM.

Mangel Wurtzel & Turnep Seeds.

A LARGE importation of superior MANGEL WURTZEL, WHITE FIELD, AND OTHER TURNEP SEEDS, together with a fine lot of English Garden Seeds, of the growth of 1835, just received at the ROCHESTER SEED STORE.

We are confident these seeds will prove of the first quality, and they will be afforded at a less price than heretofore.

may 7 REYNOLDS & BATEHAM.

THE SILK CULTURIST

AND FARMER'S MANUAL.

Published monthly by the Executive Committee of the Hartford County Silk Society, at 50 cents per annum. Volumes I. and II.

THE object of this publication is to disseminate a thorough knowledge of the Silk business. The cultivation of the *M*ulberry Tree in all its varieties—rearing Silk Worms—the production of Cocoons—reeling and manufacturing Silk, and Dyeing the same. The publication will contain a complete manual of the Silk Culture from sowing the seed to preparing for market—Sewing Silk and Twist—and will keep the Culturist advised with regard to the progress of the enterprise—the formation of Societies and Companies, Enactments of Legislatures for the promotion of the object, and facts, and experiments of individuals. It will also contain choice articles on new and interesting subjects connected with agriculture.

THE CULTURIST was commenced in April last, and there are now published *Five Thousand Copies* monthly, with a rapidly increasing circulation. Arrangements have been made to furnish the first volume to those who make early application for the second. Each volume will contain ninety-six quarto pages. One dollar forwarded to F. G. COMSTOCK, Secretary, Hartford, Conn. free of expense, will pay for both volumes, or fifty cents for the latter. The second volume commences the first of April. No subscriptions received unless paid in advance.

Knowing the great difficulty of obtaining genuine Seed at a distance, the Secretary of the Society will forward *White Italian Mulberry Seed for* 1000 *Trees* to those who are subscribers to the First Volume and order the *Second*, and to those who subscribe for both Volumes before the first of July next.

Hartford, Conn. April, 1836.

☞ REYNOLDS & BATEHAM, Agents, Rochester. april 16

THE FARMER.

Look at the Farmer and you'll see,
If you have eyes at all like me,
The most independent of all
That dwell upon this earthly ball.

Look at the Farmer, and you'll find
A person of contented mind,
Of joyful heart and gen'rous soul,
With cash enough at his control.

Look at the Farmer, and you'll say
He is the glory of the day;
Up to him, (for he's at the head,)
See all classes look for their bread.

Look at the Farmer; gently bow,
And smile to see him hold his plough,
Then retire to thy humble task,
Resolved to be a Farmer at last.

MEDICAL STUDENT.

Marcellus, May 12, 1836.

Beet-Root Sugar.

The following letter appeared some days since in the Boston Daily Advertiser. The statements it furnishes are, beyond doubt, accurate, and we hope, will induce some of our agriculturists to make experiments in the manufacture :—

Boston, March 28, 1836.

To the editor of the Daily Advertiser:

If you should judge the present communication worthy of attention, it is at your disposal. In order to satisfy yourself concerning the authenticity of my statements, I subjoin documents for your perusal, when at leisure.

The manufacture of sugar of beet has ceased to be an object of ridicule; the advantages that France draws from it are palpable and great, and the benefits which the manufacturers derive from it are now such, that the French Minister of the Treasury has proposed to lay a tax upon it. France owes this new branch of industry to that great man whom she will honor through all times; for, had it not been for his sagacity and powerful assistance, it would have shared the fate of many other improvements, lying for ages, or dying in their infancy, once pronounced by ordinary men visionary projects.

The discovery that beet contains a perfect sugar remained for over sixty years without any useful application; many attempts, however, had been made to derive the benefit of it; but those having made these attempts, being rather men of science than men of business, having operated only upon a small scale, with purely scientific views, and having made no calculations, either of expenditures or results, they had no ground to proceed upon. I undertook to solve that problem, and to that effect made the first, in France, an experiment on a large scale, and by a sufficient reward induced a chemist to assist me.

The result of this experiment was transmitted to Napoleon, on the 19th of March, 1811, and by his order rendered public; and though the birth of his son took place on the 21st of the same month, on the 25th following appeared the decree, a copy of which is among the subjoined documents. By this decree, as you will perceive, he created six experimental factories for the manufacturing of Sugar, he appoints me the director of one of them, which factory he gives to me in property, as a reward for my labor, and for having (*perfectionne*) improved the process far obtaining the sugar of beet. Such was my zeal, that my factory in the fall of 1813 was prepared, and all the beet raised by me or contracted for, so as to produce 1500 lbs. a day of brown sugar, and the same rifined. The first entry of the allies into France caused the total ruin of my establishment. Up to 1816, political events were unfavorable for sugar making, but from that year this manufacture was resumed, and since never ceased to increase and improve; it is now computed that over 300 such manufactories exist, producing together yearly about from 18 to 20 millions of pounds of brown sugar.

Now, sir, since the making of sugar of beet begins to attract the attention of some agriculturers of this country, I deem it of interest for them, and to gratify the curiosity of others, here to state what were the calculations made in France in 1832, (the latest date of my information) and add a few observations respecting the benefits one may derive by the mere culture of beets in this country. It is generally admitted, viz:—

That one ton (2000 lbs.) of beet delivered at the factory, costs.....$3,00
That the expenses to work one ton of beet for obtaining its sugar.....$4,00

That 2000 lbs. beets will yield 100 lbs. brown sugar, costing.....$7,00

Thus one pound of brown sugar, good quality, costs 7 cents.

By a comparison of the expenses of culture in various parts of France, and on various soils and situation, the average expenses of cultivating there the extent of an American acre of land, are as follows:—Rent and taxes, $5 60; ploughing and harrowing, $2 88; manure, $1 93; sowing, 50 cents; weedings and hoeing, $2 40; gathering, $1 60; carting $2 56; farmer's profit, $4 00. Making a total of $21 46.

The produce varies according to the quality of the soil, the quanty of manure used, and the care bestowed on the culture—as we have taken the average of the expenses, so we must take the average of the produce, which is of 7 tons. Some lands yield as much as 15 tons.

The four dollars profit the French farmer derives from this culture, on every acre, is far from being the only one; the others are,

1st. The good state in which the field is left after gathering the beets—no further manure being wanted for the succeeding crop, which crop, experience has proved to be always more abundant and of a better quality, when succeeding the culture of beets; owing to the destruction of the noxious weeds, caused by weeding the beets when young, and prevented from growing, by the thick foliage of the beets, when strong.

2d. The facility afforded the cultivator to apply to the culture of beet, lands which he formerly let lie fallow, and consequently, without any additional expenses of rent and taxes, deriving as good a revenue from this land as any other producing the most.

3d. The advantages the cultivator derives by the purchase from the manufacturer, of the pumice of beet at a price not higer than beets, when experience has proved this pumice is worth for him fifty per cent. more; for in fact it is after all but beet—deprived of two-thirds of water, and consequently a more nourishing food for his cattle; perfectly fitted for fattening them, producing wonders in that respect, which could not be expected from beets in their natural state.

The following is a statement of the receipt and expenditure of a sugar establishment, as reported to the society for the encouragement of manufacture in France. The whole work was performed in ninety-one days.

Purchase of 500 tons of beet, delivered at 3 20		$1600 00
1638 days work of men, at 20s.		
455 do. of women, at 12s, 364 do. of children, at 5s,		4000 40
For extra work during the night,		109 20
40 cubic feet wood for fuel daily, (28 cords 3-100 at $16 7-100 per cord,)		473 20
Sundry materials for manufacturing purposes,		813 60
Food for 18 oxen used in the mill,		163 60
Interest on $3000 at 15 per cent. for wear and tear,		450 00
Rent for buildings,		120 00
Total		$4130 00
Deduct for Molasses sold,	$320	
125 tons pumice at $3 20	400	
Value of some materials left,	30	—750
Produce of 50,000 lbs. brown Sugar at $00 67-10		$3380 00
Sale of 36,000 lbs. 1st quality, at $0 15	$5400	
Sale of 14,000, 2d quality, at 10,	1400	—6800
Profit,		$3420 00

Should this notice be favorably received, I have at your disposal a few particulars respecting the cultivation of beets.

I am respectfully, sir, your most ob't serv't.

MAX'N ISNARD,
French Vice-Consul for Boston.

Report on Cotton.—A very valuable report has been made by the Secretary of the Treasury on the cultivation, manufacture, and foreign trade of Cotton, which comprises a mass of information which is not less interesting than valuable. From a table in this report we learn that in 1791 the capital employed in connexion with the growing of cotton in the United States, was 3 1-2 millions of dollars; in Brazil, 33 millions. Ten years after, the capital employed in the United States, was 80 millions; in Brazil, 50 millions. In 1811, capital employed in the United States, 134 millions; Brazil 58 millions. In 1821, capital employed, United States, 300 millions; Brazil, 83 millions. In 1831, capital employed, United States, 650 millions; Brazil, 58 millions. In 1835, capital employed, United States, 800 Millions; Brazil 50 millions.

Seed Oats.

50 BUSHELS English Oats of American growth, weighing 38 lbs. the bushel, for sale at the Rochester Seed Store. Price 65 cts. per bushels. may 7

WILLIAM ATKINSON,
REAL ESTATE BROKER,

17, *Exchange-street, Rochester.*

BUYS and sells Farms and City Property on commission, and attends to the collection of Mortgages.

☞ Several valuable Farms for sale.
February, 1836. feb 20f6m*

Robbins' Planting Machine.

WITH this Machine Corn, Beans, Peas, Broom Corn, Mangel Wurtzel, Turneps, Onions, and seeds of almost every description, can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe. One man may easily plant five acres a day, placing the seeds any given distance apart, from two or more inches, and in rows two and a half feet apart.

Machines can be had by applying to REYNOLDS & BATEHAM, Rochester; C. N. BEMENT, Treasurer of the State Agricultural Society, Albany; BUSHROD BUCK, Lanesborough, Berkshire county, Mass.; and DANIEL T. BUCK, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

Lowville, Nov. 24, 1835. nov 28–6m

Monroe Horticultural Garden & NURSERY.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornament Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Mo*nroe co. N.S Y. ept. 13, 1835.